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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MILLER, CARL STUART

ART UNIT

PAPER NUMBER

3747

DATE MAILED: 08/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

SD

**Office Action Summary**

Application No.

09/298,926

Applicant(s)

Examiner

Miller

Group Art Unit

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

**Period for Response**

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

**Status**

- ☒ Responsive to communication(s) filed on 5/6/02.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

**Disposition of Claims**

- ☒ Claim(s) 1-25 is/are pending in the application.
- Of the above claim(s) 2 1-22 and 25 is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-13, 16-19 and 23 is/are rejected.
- ☒ Claim(s) 14, 15, 20 and 24 is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

**Application Papers**

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119 (a)-(d)**

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

**Attachment(s)**

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_ ☐ Interview Summary, PTO-413
- ☒ Notice of References Cited, PTO-892 ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Other \_\_\_\_\_

**Office Action Summary**

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The examiner has entered applicant's amendment after final filed May 6, 2002 and hereby withdraws the final rejection of 1/14/02 in view of the arguments presented with regard to Claim 12. The examiner has also reconsidered the withdrawal of claims 21-25 but still believes that withdrawal is proper because a review of the specification indicates that a clear distinction is made between the restriction of Figure 1 and the on-off valve of Figure 2. As noted in previous Office actions, there is no intrinsically provided restriction in an on-off valve. With regard to the argument that Claim 25 depends from claim 21, Claim 25 would be rejected under 35 USC 112 first paragraph if examined because the disclosure does not support such a dependency.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 7, 17, 18, 19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishida in view of Fujino and Mathis.

Ishida and Fujino apply as per the previous office action and Mathis teaches a two-stage pump system wherein the feed to the high stage pump is variable (just as Ishida's feed is variable) and the high pressure pump is mechanically driven. Since mechanically driven high pressure pumps have been used for many years in the direct injection systems, it would have been obvious to use such a mechanically driven pump in Ishida.

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Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ishida, Fujino and Mathis as applied to claim 1 above, and further in view of Learman.

Learman applies as per the previous office action and for the reasons noted therein.

Claims 2-6 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishida, Fujino and Mathis as applied to claim 1 above, and further in view of Yoshiume.

Yoshiume applies as noted in the previous office action and for the reasons noted therein.

Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishida, Fujino, Mathis and Yoshiume as applied to claim 11 above, and further in view of Cummins.

Cummins applies as noted in the previous office action and for the reasons noted therein.

Claims 14, 15, 20 and 24 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant's arguments filed May 6, 2002 have been fully considered but they are not persuasive.


In particular, applicant's new claim 1 has been entered and Mathis applied to show that mechanically driven high pressure pumps are well known in the art.

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Any inquiry concerning this communication should be directed to C. Miller at telephone number 703-308-2653.

  
**Carl S. Miller**  
**Primary Examiner**

C. Miller

August 24, 2002